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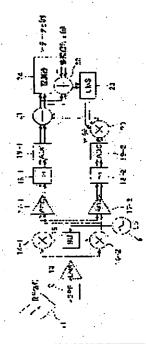
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## (54) LOW-IF-SYSTEM RECEIVER AND PROGRAM

(57) Abstract:

PROBLEM TO BE SOLVED: To provide a low-IF receiver and a program for effectively eliminating the interference of adjacent channels without adding any special components to an analog circuit.

SOLUTION: The low-IF-system receiver comprises an antenna 11, a BPF 12, an LNA 13, mixers 14-1, 14-2, a 90° phase shifter 15, a local oscillator 16, amplifiers 17-1 to 17-2, band division filters 18-1 to 18-2; ADCs 19-1 to 19-2, a multiplier 20, an adder 21, an adder 22, an LMS (Least Mean Square) 23, and a demodulator 24. A coefficient w(n) for indicating the degree of interference from the adjacent channels is optimized in a digital region by an LMS 23 algorithm, thus reducing the influence of the adjacent channels, and achieving multi-channel reception by the ADCs having relatively low resolution by adaptive digital signal processing.



## LEGAL STATUS

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